

NEW SPIDERS FROM OHIO.*

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The following nine species of spiders do not appear to have been described. The type specimens will be retained in the collections of the Department of Zoology, Ohio State University, Columbus, Ohio.

Drassodes auriculoides n. sp.

Female: Length 10 mm. Cephalothorax brownish yellow, front of head and mandibles much darker and redder, a dark line around the edge of the cephalothorax. Hairs on the mandibles with a dark spot at the base of each. Legs yellow, these and the cephalothorax covered with a thin down of white hairs among which are some black hairs. Feet with heavy dark scropulæ which thin out toward the middle of the metatarsi. Sternum yellow, with a border of heavy brown chitin, truncated in front, widest at second coxæ, with a right angle point between the posterior coxæ. Posterior eyes in a straight row, rather far from the front row. P. M. E. rectangular, almost square, close together. (Pl. XV, Fig. 4a). Abdomen long and low, widest at the posterior third, narrowing abruptly to an obtuse point. Color of the abdomen under alcohol a light brownish gray, due to the mixture of black and white hairs, a long narrow light-colored basal stripe, becoming dark gray in the middle, ends in a series of irregularly placed dark round spots a short distance in front of the tip. Spinnerets, long, yellowish brown, approximately equal. Venter lighter than dorsum, much lighter in front of epigastric furrow. Epigynum brown, consisting of three lobes, the middle nearly square, the side ones each resembling a human ear. (Plate XV, Fig. 4b).

One female under a board in a high dry pasture, Rock-bridge, Ohio, September 30, 1917.

Prosthesima lacca n. sp.

Male: Length 2 mm. Cephalothorax almost black, bare and shiny, as if made of a dark wood showing some brown grains, freshly lacquered. Oval shield on base of abdomen with the same characters, except that it is hairy. Anterior coxæ dark, the others pale yellow. All the tarsi and metatarsi pale yellow, the femur, patella and tibia of the first legs dark, shining, the others dark before and behind, but light above. Sternum and endites dark, shiny. Abdomen, above black with bluish reflections, rather shiny, below lighter. Tarsus

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of palp almost spherical, on the outside a dark forked process the upper tooth of which turns outward; above this is the end of the short, fine tube which ends on a clear swollen area; on the inside of the palpal organ is another forked process directly opposite the first but not quite so large nor so clearly marked. (Pl. XV, Fig. 3).

One male from Columbus, Ohio, June 10, 1917.

***Prothesima lutea* n. sp.**

Male: Length 5.5 mm. Head, thorax, legs and shield on the base of the abdomen uniform light brownish yellow. Abdomen cream colored, covered with long black hairs, which gives the whole a greenish tinge, the dark edges of a long narrow lanceolate basal mark are visible through the shield and extend a short distance beyond the second pair of muscular impressions. The first pair of muscular impressions are rather prominent, just inside the edge of the shield. Spinnerets and venter cream colored. Tibiæ of first and second legs with one spine on the anterior side below, slightly beyond the middle, and one at the extreme end, none on the posterior side. P. M. E. large, oval, close together. P. S. E. about the same size as the A. S. E. and close to them. A. M. E. large, half their diameter apart, almost touching the A. S. E. Palpal organ ending in a tube which curves upward toward the tip of the tarsus. Tibia of palp with a short spur on the outside, which is prolonged dorsally in a delicate spine. (Pl. XV, Figs. 5a, 5b).

One male from Sugar Grove, Ohio, July, 1915.

***Cybaeus silicis* n. sp.**

Male: 8 to 10 mm. long. Cephalothorax and legs light brownish yellow. Cephalothorax high, evenly rounded, a dark V-shaped mark with its point at the dorsal groove, a narrow dark line at the extreme margin. Dorsal groove dark. Mandibles reddish, robust at base, furrow armed in front with two large and one small teeth, and in back with three small and three or four minute teeth. Abdomen high, highest at the front, widest behind the middle, dull gray with a white basal lanceolate line and six or seven white spots on each side of the median line, the anterior spots round, the middle elongate, the posterior diagonal lines or joined with those of the opposite side to form bars. Venter white. Palpus long, femur longer than patella plus tibia, patella widened distally with a group of about ten minute conical spines on the extended side; tibia with a large, flattened tooth. (Pl. XV, Fig. 7b).

Female much like the male. Epigynum with a broad opening which apparently opens below into a pair of dark sacs, at the sides are two round dark bodies. (Pl. XV, Fig. 7a).

Several pairs from Bainbridge, Ohio, August 17, 1917, where they were found on the sides of large boulders more or less buried in leaves and humus in a deep ravine. A few specimens from Rockbridge, Ohio.

Grammonota vittata n. sp.

Male: 2 mm. long. Female: 2.7 mm. long. Head, cephalothorax, and legs light brownish yellow. Eyes surrounded by dark rings. Edges of cephalothorax slightly darker, dorsal groove dark. Sternum yellow, darker at the edge. Abdomen grayish yellow, a dark sooty, median stripe extends from the front edge two-thirds of the length of the abdomen, becoming narrower posteriorly. Posterior third of abdomen showing traces of the stripe and marked by five or six narrow, curving, transverse, light lines, which divide this part into five or six poorly defined chevrons. Six well defined teeth on the anterior edge of the furrow of the chelicerae. Beneath the tibia of the first leg of the female are three pairs of long slender spreading spines, beneath the metatarsus are two pairs of similar spines. There is one slender spine above at the end of the patella and one at the basal third of the tibia. The spines in the male are weakly developed, except the two pairs under the anterior metatarsi. The male palpus is much like that of *G. inornata*, except that the tarsus in *vittata* flares on the outside into a long flange and the tooth on the tibia is broad and thin. (Pl. XV, Figs. 1a, 1b, 1c, 1d).

This species is about the same size as *inornata*, but is easily distinguished by the stripe, the light color, and the well developed spines.

Several males and females from Hebron, Ohio, near the canal, October 3, 1918. In one case a male and female were found together in a small curled dead leaf about a foot above the ground.

Oxyptila marshalli n. sp.

Male: Length 3 mm. A very striking spider, the cephalothorax a rich dark golden brown, marked with black as follows: A central narrow dark line ending at the posterior slope, a dark line on each side of this runs parallel with it from the eye region, bending toward it just before it ends, the three lines end parallel to each other and very close together, the side lines lie in an area of dark pigment which forms two indistinct stripes. Two broad dark stripes lie on the outer sides of the cephalothorax bordered on the outside by a very narrow light stripe which is in turn bordered by a hair line of black. Abdomen much wrinkled, each ridge dark, each depression light. Sternum and coxae light yellow, a short dark streak at the posterior point of the sternum. Abdomen colored below as above, except that there is some pink color present. Like *O. nevadensis*, metatarsi I and II have two pairs of spines below and two on each side just above and in front of these. (Pl. XV, Fig. 2b). The A. M. E. are only half as large as the P. S. E. and only slightly larger than the P. M. E. Femur I has one small spine above and three in a row in front of this. Tibia of the palp with three projections. (Pl. XV, Fig. 2a).

One male under a dry log in pine woods at Sugar Grove, Ohio, September 11, 1917.

This species is named for Walter W. Marshall, of Sugar Grove, Ohio, a promising young zoölogist and former student of the Department of Zoölogy of Ohio State University, who died in his country's service at Camp Sherman, Chillicothe, Ohio, on October 4th, 1918. Mr. Marshall was interested in the *Phalangida* and was collecting with me when the specimen described above was taken.

***Phidippus hirsutus* n. sp.**

Male: Length 9 mm. Head high and swollen, highest at the level of the second row of eyes. Color in alcohol: Cephalothorax (somewhat rubbed) dark red, grading to black around the eyes, from the depression between the posterior eyes a narrow black line runs posteriorly to the border, on each side of this are two or three black lines which run diagonally backward and curve outward toward the edge, hairs around the eyes long, the upper ones black and the lower white. Clypeus with long white hairs which extend half way down the mandibles. Sides of cephalothorax with a sparse covering of white hairs. Lower part of mandibles green, iridescent. Femora dark reddish brown, extremities lighter, the front side of the first two femora covered with bright yellow scales and some long yellow hairs; lower side of patella and tibia with a fringe of long yellow hairs. Palpus with white scales above and long white hairs on the outside. Abdomen rubbed above, but shows no indications of lines or spots. The spur on the tibia of the palp is divided into three teeth, the tube of the palpal organ is broad, thin and blade-like. (Pl. XV, Fig. 6b).

One male, Rockbridge, Ohio, (Cantwell Cliffs), October 4, 1914.

Female: A female which appears to belong to the same species was taken at the same place in July, 1914. It is stouter and heavier than the male, but very much like it. The eye region is black with some bronze iridescence, sparsely clothed with black hairs. Cephalothorax dark red, sparsely covered with white scales, white hairs and black hairs. Dark lines like those in the male are present. Clypeus snow white, with some long white hairs. Palps with a brush of long white hairs. Legs well covered below with long white hairs, white scales and some black hairs. Abdomen dull tan color, due to a mixture of short tan and white hairs, through which extend long black and some long white hairs. Venter similar in color to dorsum. Young specimens alive appear to be a mass of long gray hairs. On these a light line is visible at the base of the abdomen and there are indications of some light diagonal lines. The epigynum is longer than wide. (Pl. XV, Fig. 6a).

Sittacus cursor n. sp.

Male: Length 2.3 mm. Color alive, entire upper surface a uniform silver gray. Color under alcohol, the cephalic plate bluish black, thorax yellow brown, a wide black line encircling the thorax from the base of one palp to the base of the other. Cephalothorax and abdomen uniformly covered with white hairs. Clypeus light. Three prominent bristles between the A. M. E., the upper one bent dorsally. Abdomen marked with small dark spots, which at the posterior form four chevrons, sides marked by many longitudinal dark lines, base above with long white and some long black hairs. Anterior femora black above. Anterior patellæ spotted in the middle, with a narrow dark band at each end. Femora below with a narrow band at base, a wide one in the middle and another at the end. Sternum mottled with dark pigment. Tibia of palp very large with a long spine. (Pl. XV, Fig. 8a). The male runs with great rapidity.

Female: Length 2.7-4.0 mm. Color alive, uniform brownish gray, evidently due to the many dark orange hairs mixed with the white. Color under alcohol, like the male, except that the spots on the abdomen are larger and more irregular. Epigynum a triangular area, a single opening at the anterior end, and two circles near together at the posterior. In one specimen the circles are side by side, in the other specimen they are one in front and the other behind. (Pl. XV, Fig. 8b).

One male from Columbus, Ohio, July 2, 1917; one female, from Buckeye Lake, Ohio, June 24, 1917; one female from Columbus, Ohio, June 24, 1918, in a nest on a stone at the edge of a timothy field.

Sassacus smaragdinus n. sp.

Female: Length 4.5 mm. Color alive a brilliant emerald green, the basal band on the abdomen, sides of cephalothorax and scales on palpi and legs brilliant yellow. Color in alcohol, integument dull black, covered with scales the color of which changes with the angle of the light from deep purple to green. This species is rather closely related to *S. papenhoei*, but differs in the following particulars: The cephalothorax is practically flat on top (slightly higher at the third eyes) and slopes abruptly to the posterior border, the A. S. E. are only one-third as large as the A. M. E., the mandibles are inclined forward so that they protrude in front of the eyes when viewed from above, the lip is longer than wide, the clypeus is red, showing no white, except a few very long white scales which project between the bases of the mandibles. Femora black. Patellæ and tibiæ dark red brown. Metatarsi yellow, with a dark band at end. Tarsi yellow. Claws and hairs of foot black. Patella and tibia I with a patch of brilliant yellow scales above at distal end. Similar patches of yellow scales occur on patella, tibia and tarsus of the palp. The cephalothorax is widest at the middle of

the thorax where it slopes abruptly downward, is narrowed gradually forward and suddenly backward from this point. (Epigynum, Pl. XV, Fig. 9).

One female from the high upland prairie above Cantwell Cliffs, five miles south of Rockbridge, Ohio, July 8, 1918. This specimen was in a silk cocoon in a curled Smilax leaf and was apparently ready to lay eggs.

EXPLANATION OF PLATE XV.

1. *Grammonota vittata*. 1a, dorsal view of male; 1b, outside of right palpal organ; 1c, inside of right palpal organ; 1d, epigynum.
2. *Oxyptila marshalli*. 2a, outside of right palpal organ; 2b, anterior side of right metatarsus.
3. *Prothesima lacca*, outside of left palpus.
4. *Drassodes auriculoides*. 4a, eyes from above; 4b, epigynum.
5. *Prothesima lutea*. 5a, eyes from above; 5b, palpus.
6. *Phidippus hirsutus*, 6a, epigynum; 6b, palpal organ.
7. *Cybaeus silicis*. 7a, epigynum; 7b, left palpus.
8. *Sittacus cursor*. 8a, palpus; 8b, epigynum.
9. *Sassacus smaragdinus*, epigynum.